

Cisco SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch: WebView Cisco Small Business Managed Switches

Secure, Reliable, Intelligent Switching for Your Growing Small Business

Highlights

- Connects up to 48 network devices - PCs, printers, and servers - to share and transfer files and videos across your network
- Strong security protects network traffic to keep unauthorized users off the network
- Intelligent QoS helps ensure a consistent network experience and supports networked applications including voice, video, and data storage
- Simplified, web-based management for easy installation and configuration

Figure 1. Cisco SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch: WebView



Product Overview

Growing businesses require cost-effective networking solutions that can scale to meet ever-changing business needs. The Cisco® SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch (Figure 1) brings increased intelligence and security to the network infrastructure. The forty-eight 10/100 Mbps ports enable you to consolidate your network from several smaller switches or hubs to a single managed switch. The optional Gigabit optical interfaces allow you to expand the network as your business grows.

Network security is a top priority in any size business. Most business data networks, large and small, are unsecured. Unauthorized access to the network and mission-critical data is a constant concern. The Cisco SRW248G4 helps secure the network through 802.1X port authentication and MAC-based filtering. The 802.1X standard requires clients to authenticate themselves before the port will pass data for them.

Businesses are recognizing the benefits of voice over IP (VoIP) and are quickly migrating their voice services to IP-based platforms, requiring their local area networks to support both voice and data applications. In unmanaged IP networks, bursty data sessions can disrupt voice packet delivery, causing poor voice quality. With the enhanced quality of service (QoS) and traffic-

management features in the Cisco SRW248G4, voice data can be prioritized, helping ensure clear and reliable voice communications.

Enabling the advanced features of the Cisco SRW248G4 further secures the integrity of your network. The WebView interface provides an intuitive, highly secure management interface, helping you to better utilize the comprehensive feature set of the switch for a better-optimized, more secure network.

Features

- Forty-eight 10/100 switched RJ-45 ports with automatic medium dependent interface (MDI) and MDI crossover (MDI-X) cable detection
- Four 10/100/1000 switched RJ-45 ports with auto MDI/MDI-X cable detection
- Two shared mini Gigabit Interface Converter (mini-GBIC) ports for optical or copper interconnection
- Nonblocking, store-and-forward switching mechanism
- Simplified QoS management enabled by advanced queuing techniques using 802.1p, Differentiated Services (DiffServ), or type of service (ToS) traffic prioritization specifications
- Configuration and monitoring from a standard web browser with WebView
- Highly secure remote management of the switch via Secure Shell (SSH) and SSL secure channel network protocols
- 802.1Q-based VLANs enable segmentation of networks for improved performance and security
- Private VLAN Edge (PVE) for simplified network isolation of guest connections or autonomous networks
- Automatic configuration of VLANs across multiple switches through Generic VLAN Registration Protocol (GVRP) and Generic Attribute Registration Protocol (GARP)
- Automatic port configuration through auto MDI/MDI-X
- 802.1ab (Link Layer Discovery Protocol [LLDP]) and Universal Plug and Play (UPnP) support
- User/network port-level security via 802.1X authentication and MAC-based filtering
- Increased bandwidth (up to 8x) and added link redundancy with Link Aggregation Control Protocol (LACP)
- Enhanced rate-limiting capabilities provide control, including back pressure to control the rate at which data can flow into and out of a port
- Multicasting, broadcasting, and flooding control
- Port mirroring for noninvasive monitoring of switch traffic
- Mini jumbo frame support
- Simple Network Management Protocol (SNMP) versions 1, 2c, and 3
- Fully rack mountable using the included rack-mounting hardware

Specifications

Table 1 contains the specifications, package contents, and minimum requirements for the Cisco SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch.

Table 1. Specifications for the Cisco SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch: WebView

Specifications	
Ports	<ul style="list-style-type: none"> • 48 RJ-45 connectors for 10BASE-T and 100BASE-TX • 4 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T with 2 shared Small Form-Factor Pluggable (SFP) slots • Auto MDI/MDI-X • Auto negotiate/manual setting
Cabling type	<ul style="list-style-type: none"> • Unshielded twisted pair (UTP) Category 5 or better for 10BASE-T/100BASE-TX • UTP Category 5 Ethernet or better for 1000BASE-T
LEDs	Power, Link/Act, Speed
Performance	
Switching capacity	17.6 Gbps, nonblocking
MAC table size	8000
Number of VLANs	256 - static and dynamic
Management	
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
SNMP	SNMP versions 1, 2, and 3 with support for traps
SNMP MIBs	<ul style="list-style-type: none"> • RFC1213 MIB-2 • RFC2863 interface MIB • RFC2665 Ether-like MIB • RFC1493 bridge MIB • RFC2674 extended bridge MIB (P-bridge, Q-bridge) • RFC2819 RMON MIB (groups 1, 2, 3, and 9 only) • RFC 2618 RADIUS client MIB
Remote Monitoring (RMON)	Embedded RMON software agent supports 4 RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
Firmware upgrade	<ul style="list-style-type: none"> • Web browser upgrade (HTTP) • Trivial File Transfer Protocol (TFTP) upgrade
Port mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe
Other management	<ul style="list-style-type: none"> • RFC854 Telnet (menu-driven configuration) • SSH and Telnet management • Telnet client • SSL security for web user interface • Switch audit log • Dynamic Host Configuration Protocol (DHCP) client • BOOTP • Simple Network Time Protocol (SNTP) • Xmodem upgrade • Cable diagnostics • Ping • Traceroute • Syslog
Security	
IEEE 802.1X	802.1X - RADIUS authentication; MD5 encryption
Access control	Filtering; MAC-based
Availability	
Link aggregation	<ul style="list-style-type: none"> • Link aggregation using IEEE 802.3ad LACP • Up to 8 ports in up to 8 trunks

Storm control	Broadcast, multicast, and unknown unicast
Spanning Tree	IEEE 802.1d Spanning Tree, IEEE 802.1s Multiple Spanning Tree, IEEE 802.1w Rapid Spanning Tree, Fast Linkover
Internet Group Management Protocol (IGMP) snooping	IGMP (versions 1 and 2) snooping provides for fast client joins and leaves of multicast streams and limits bandwidth-intensive video traffic to only the requestors
QoS	
Priority levels	4 hardware queues
Scheduling	Priority queuing and weighted round-robin (WRR)
Class of service (CoS)	<ul style="list-style-type: none"> • Port based • 802.1p VLAN priority based • IP ToS/DSCP based • IPv4 and IPv6 traffic class-based CoS
Rate limiting	Ingress policer, egress shaper
Layer 2	
VLAN	<ul style="list-style-type: none"> • Port-based and 802.1Q-based VLANs • PVE • Management VLAN
Head-of-line (HOL) blocking	HOL blocking prevention
Mini jumbo frame	Supports frames up to 1600 bytes
Dynamic VLAN	GVRP - dynamic VLAN registration
Standards	<ul style="list-style-type: none"> • 802.3i 10BASE-T Ethernet • 802.3u 100BASE-TX Fast Ethernet • 802.3ab 1000BASE-T Gigabit Ethernet • 802.3z Gigabit Ethernet • 802.3x flow control
Environmental	
Dimensions W x H x D	16.93 x 1.75 x 13.78 in. (430 x 45 x 350 mm)
Unit weight	8.60 lb (3.9 kg)
Power	Internal switching power
Certification	FCC Part 15 Class A, CE Class A, UL, cUL, CE mark, CB
Operating temperature	32° to 104°F (0° to 40°C)
Storage temperature	-4° to 158°F (-20° to 70°C)
Operating humidity	10% to 90%
Storage humidity	10% to 95%
Package Contents	
<ul style="list-style-type: none"> • Cisco SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch • AC power cord • Rack-mounting kit with brackets and hardware • CD with user guide in PDF format • Registration card • Console cable 	
Minimum Requirements	
<ul style="list-style-type: none"> • Web-based utility: Microsoft Internet Explorer (version 5.5 or later) • Category 5 Ethernet network cables • Operating system: Windows 2000, XP, or later 	
Product Warranty	
5-year limited hardware warranty with return to factory replacement and 90-day limited software warranty	

Cisco Limited Warranty for Cisco Small Business Series Products

This Cisco Small Business product comes with a 5-year limited hardware warranty with return to factory replacement and a 90-day limited software warranty. In addition, Cisco offers software application updates for bug fixes and telephone technical support at no charge for the first 12 months following the date of purchase. To download software updates, go to:

<http://www.cisco.com/go/smallbiz>.

Product warranty terms and other information applicable to Cisco products are available at

<http://www.cisco.com/go/warranty>.

For More Information

For more information on Cisco Small Business products and solutions, visit:

<http://www.cisco.com/smallbusiness>.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, Cisco TelePresence, Cisco WebEx, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn and Cisco Store are service marks; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCOVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0809R)